



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/676,842	10/01/2003	Brooks R. Nolan	LCOM:006	3762

7590 08/25/2004

O'KEEFE, EGAN & PETERMAN, L.L.P.
Suite 200
Building C
1101 Capital of Texas Highway South
Austin, TX 78746

EXAMINER

HOLZEN, STEPHEN A

ART UNIT PAPER NUMBER

3644

DATE MAILED: 08/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/676,842

Applicant(s)

NOLAN, BROOKS R.

Examiner

Stephen A. Holzen

Art Unit

3644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 July 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Claims 8-35 in the reply filed on 7/26/2004 is acknowledged.
2. Claims 1-7 and 36-51 have been cancelled.
3. Claims 8-35 are the only claims pending.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 8-33, 35 are rejected under 35 U.S.C. 102(b) as being anticipated by Eason (3,897,829).

Re - Claims 8 and 22: Eason discloses one or more aerial dispersant holding tanks, (12) a dispersal regulator coupled to said one or more aerial dispersant holding tanks (12), a dispersal regulator (16), an airborne dispersal device (14),

Re - Claims 9, 10, 23 and 24: wherein the tanks are side loaded into the cargo/passenger compartment of the aircraft. (see figure 1)

Re - Claims 11 and 25: wherein each of said aerial dispersant holding tanks comprises at least one flow opening on a first end of said holding tank, said first flow opening being configured to sealably mate with a flow opening of an

Art Unit: 3644

adjacent aerial dispersant holding tank when two or more of said aerial dispersant tanks are positioned in adjacent end-to-end relationship within the baggage or cargo hold of a host aircraft. (see opening/passageways at the lower extremities of tanks 12)

Re - Claims 12 and 26: wherein a first one of said aerial dispersant holding tanks is configured to be coupled to at least a second one of said aerial dispersant holding tanks to provide a dispersant material flow path from said first aerial dispersant holding tank to said second aerial dispersant holding tank when said first and second aerial dispersant tanks are positioned in adjacent end-to-end relationship within the baggage or cargo hold of a host aircraft. (see Figure 2)

Re - Claim 13: wherein the regulator comprise at least a part of a dispersal equipment container or a dispersal equipment pallet. (see Figure 6)

Re - Claim 14: wherein said dispersal regulator comprise a pump (see Figure 6)

Re - claims 15 and 27: wherein at least one of said first or second aerial dispersant tanks comprises flow control equipment configured to control flow of materials from said first aerial dispersant holding tank to said second aerial dispersant holding tank. (see figure 2)

Re - Claim 16 and 28: further comprising a pseudo-cargo door; and wherein said airborne dispersal device is configured to be coupled to said dispersal regulator through said pseudo cargo door. (see Figure 1)

Re - Claim 17 and 29: further comprising a pseudo-passenger door; and wherein said airborne dispersal device is configured to be coupled to said dispersal regulator through said pseudo passenger door. (see Figure 1)

Re - Claims 18 and 31: wherein said one or more aerial dispersant holding tanks comprise a material containment subsystem', wherein said dispersal regulator comprises a material dispersal subsystem; and wherein said aerial dispersion system further comprises a control subsystem configured to be coupled to said material containment subsystem and said material dispersal subsystem. (see Figure 6)

Re - Claims 19 and 32: further comprising a navigation subsystem, a communications subsystem, and a sensor subsystem', wherein said navigation subsystem, communications subsystem, and sensor subsystem are configured to be coupled to said control subsystem', and wherein said control subsystem, said navigation subsystem and said communications subsystem are configured to be coupled to one or more systems of a host aircraft. (see Figure 6)

Re - Claim 20 and 30: Eason discloses every limitation of this claim (see Figures 1 and 2)

Re - Claim 21: Eason discloses every limitation of this claim (see Figures 1 and 2)

Re - Claim 33: Eason discloses dispersing one or more materials from the aircraft based material dispersion system of claim 22 (see Figure 1)

Art Unit: 3644

Re - Claim 35: wherein said host aircraft comprise a wide body aircraft.
(the aircraft of Eason has been considered for the purpose of this rejection as
'wide bodied'.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eason in view of McConnell Sr. (6,622,966). Eason does not disclose a coordinated manner of dispersing materials from a fleet of aircraft based material dispersion system. However McConnell teaches that it is well known in the art to use a fleet of aircrafts for the dispersion of materials to fight fires. It would have been obvious at the time of the invention to one having ordinary skill in the art to include the teachings of McConnell Sr. into the method of Eason for the purpose of more efficiently extinguishing fires.

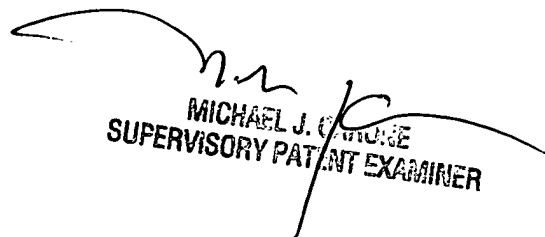
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen A. Holzen whose telephone number is 703-308-2484. The examiner can normally be reached on M-F 7:30 - 5:00.

Art Unit: 3644

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael J. Carone can be reached on 703 306-4198. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sah


MICHAEL J. CARONE
SUPERVISORY PATENT EXAMINER